PeriLUX LED™ Portable Light Source (Project 05-31) (6/06) UPDATE (4/07)

The PeriLUX LED™ headlight is designed to provide portable illumination for the health care provider. The headlight uses a light-emitting diode (LED) with a lamp life of up to 100,000 hours. A rechargeable NiMH battery with approximately 500 charge cycles provides the power. The manufacturer claims the battery has a capacity up to eight hours on a single overnight charge. The headlight system comes with a battery charger. The PeriLUX LED™ is adaptable to all magnification loupes and is available in three models: the flip-up loupe mount, the through-the-lens mount, and the Freedom™ headband. The headlight has a one-year warranty.

Manufacturer:

PeriOptix Inc. 27281 Las Ramblas, Suite 200 Mission Viejo, CA 92691 (888) 360-0033 (969) 366-3333 (969) 366-0033 FAX www.perioptix.com

Suggested Retail Price \$695.00

Government Price

\$645.00

ADVANTAGES:

- + Portable
- + Lightweight/comfortable headband
- + Inexpensive
- + Adequate spot size
- + 8-hour operating time on single charge
- + Minimal heat generation
- + Did not initiate polymerization reaction of light sensitive materials

DISADVANTAGES:

- Weak intensity
- Difficult to adjust focal area

SUMMARY AND CONCLUSIONS:

The Perilux LED™ portable light source is the first LED headlight evaluated by the Dental Evaluation and Consultation Service. The headlight uses a LED bulb with a NiMH rechargeable battery that provides maximum portability. The battery lasts over eight hours on a full charge. The light can be attached to flipup or through-the-lens loupes. It can also be attached to the Freedom™ headband. Half of the evaluators felt the illuminance was not bright enough. The illuminance was rated less than the manufacturer's rating in the DECS lab at a distance of 14 inches but was the same as the manufacturer at 10 inches. The majority of the evaluators would purchase the headlight for their clinics. The headlight is priced very competitively and provides a lightweight, portable solution for increased illumination for the general dentist. It was an excellent light source for staff dentists supervising residents in the dental clinic. The **Perilux LED™** is rated **Acceptable** for use in US Air Force dental facilities.

UPDATE In early 2007, DECS learned that the Perilux LED™ light is being made available at a new, lower price. PeriOptix recently introduced a new headlight called the PeriStar™, which it claims has several improved features compared to the Perilux LED™.

